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ABSTRACT

In December 1993, a Syracuse University (New York) School of Information Studies team conducted seminars with two groups of Internet users interested in the availability of federal government information over the Internet. Respondents were 76 participants at a conference on government sources on the Internet and 86 middle and senior managers from federal agencies at a similar conference. The questionnaire asked about barriers to Internet use, services respondents would like to see, real world solutions to user problems, and steps federal agencies could take to improve delivery of electronic services. Participants identified many barriers to Internet use and pointed out a variety of needs, especially in the areas of locating information and increasing the information available. Suggested real-world solutions clustered in areas of funding, management, policy, standards, access and training, dissemination, and addressing the debate between public and private interests. Government middle management appears aware of the problems and potential of the Internet and ready to address the various issues. The survey questionnaire is attached. (Contains 12 references.) (SLD)

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ED 369 399

USERS' PERSPECTIVES ON U.S. GOVERNMENT INFORMATION AND SERVICES ON THE INTERNET:

A SUMMARY FROM TWO SEMINARS

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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A Report Prepared for

The Information Infrastructure Task Force

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INTRODUCTION

In December, 1993 a Syracuse University, School of Information Study team conducted seminars with two groups of Internet users interested in the availability of U.S. Federal government information over the Internet. We asked these respondents to comment on three key questions of significance to them and, we believe, the Information Infrastructure Task Force (IITF). We are providing the IITF with this information in the hope that the information will be useful during the Task Force's deliberations. The comments below are not representative of some larger population. Rather they represent the views and perceptions of these seminar participants and service providers on a range of important issues, type of information desired, and solutions available.

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Background

The information provided in this report should be considered in the larger context of the evolving Federal information policy system. Hernon and McClure (1993) have described the issues related to electronic government information policy. That paper provides a literature review, background, and context that will not be repeated here.

From the Federal government perspective, *The National Information Infrastructure: Agenda for Action* (Office of the Vice President, 1993), *Making Government Work: Electronic Delivery of Federal Services* (Office of Technology Assessment, 1993), and *What It Takes to Make it Work* (Information Infrastructure Task Force, 1994) provide a useful introduction to the topic.

In addition, the authors, and others at Syracuse University, School of Information Studies, have been involved in a number of projects related to:

- Design of a Government Information Locator Service (GILS)
- Assessment of U.S. Government Bulletin Boards
- The Z39.50 Information Retrieval Standard
- The Role of Libraries in the Provision of Electronic Government Information
- Provision of Electronic Government Information Services
- Network Literacy
- Directory and Guide to Government Information on the Internet.

The bibliographies in these sources, which are listed in the references attached to this report, can provide readers with additional information regarding the larger context for Internet-based government information services and information.

Study Population

A questionnaire (see Attachment A) was distributed to two groups. The first consisted of participants at a "Government Information Sources on the Internet" pre-conference at the Meckler, Internet World conference in New York City in

December. This group were Internet users from the business, non-profit, government, education, and research communities who selected this seminar because of their interest in and need for government information. The majority of the participants were from all over the U.S. and Canada. However there were overseas representatives as well. There were 76 respondents to this questionnaire out of 200 participants from the Meckler pre-conference.

The second group surveyed were participants in an all day Strategic Information Resource Management (SIRM) seminar entitled: "Government Information and the Internet" sponsored by Syracuse University's School of Information Studies in Washington, DC, also in December. The majority of this group were middle and senior managers in federal agencies. Also represented were lobbyists, trainers, and librarians. The majority of participants were from the Washington D.C. region however other states were represented as well. Respondents were first asked to react to the questions individually, then in small groups. The small group discussions were then summarized for the entire group of seminar participants. There were 86 participants from the SIRM seminar.

Study Questions

The participants were asked four specific questions and were invited to comment freely (see Attachment A):

- What are the key barriers you face when connecting to or using the Internet?
- What are the types of services you would like to see the government provide via the Internet?
- What are real world solutions to the barriers and need for Internet delivered services that you think the government ought to consider today?
- What important steps can Federal agencies take to improve the delivery of electronic services via the Internet?

These study questions were intended to be broad to encourage a range of comments and to encourage discussion. They were quite successful on both criteria.

FINDINGS

The findings are organized along topics and issues as they were offered by the seminar participants. Key themes, topics, and recommendations were quite similar for both groups, thus the findings from both groups are presented together.

Key Barriers

We asked the respondents: What are the key barriers you face when connecting to or using the Internet? The respondents' comments were grouped into the following categories: technical, access, training, costs, organizational, data quality, and other comments.

Technical

There were a wide range of technical concerns expressed by the respondents including:

- Lack of high quality, standard interface which can be used across a variety of hardware and software to effectively communicate and navigate the network
- Equipment which is old, diverse, or lacking including: the lack of a standard minimal workstation configuration, many who did not own their own equipment but shared it in a variety of ways, lack of computers, modems, and telephone lines. Finding equipment for staff is difficult but many respondents were worried where they would find equipment for their users
- Network congestion and capacity problems including: systems are slow or busy, long waits to connect to gophers, regularly getting inexplicably 'hung-up' for now apparent reason
- Poor connections including: problems with local or remote connection and down times and disparity of connection options depending on location (home, school or office, urban-rural)
- No technical support available due to lack of personnel, poorly trained personnel, or lack of access to training

- Software which is poorly designed, complex, variable, and unreliable including: the need to know UNIX (viewed as very unfriendly) to communicate and do minimal customization, older e-mail software which does not allow access to all the resources (or locations) on the Internet, problems when FTPing long documents. One respondent summarized: "It's clunky!"

- Range of computer security issues including ignorance of issues, uncertainty concerning severity of the problem, uncertainty regarding effective solutions

- Poor documentation for both software and hardware often attributed the frequency with which the products change and distinctions between public domain and commercial products

When compared to users the study team interviewed two years ago (McClure, Moen & Ryan, 1994, 1993, 1992) there are several observations which can be made. The December sessions' participants no longer seemed to be in awe of the technology. Respondents in earlier studies tended to blame themselves for problems. The present respondents accurately assigned blame to the technology. The reported problems with network congestion are new. Are we reaching a plateau or saturation point in which the astronomical growth, and increased bandwidth requirements (e.g., World Wide Web - Mosaic) has caught up with capacity?

Accessibility

Respondents noted a number of barriers to use which can be grouped under the heading lack of accessibility including:

- Simply getting connected can be a complex task knowing how, finding a service provider, obtaining equipment, logging in, and the list goes on with little local help available

- Lack of high quality, standard interface which can be used across a variety of hardware and software to effectively communicate and navigate the network, a repeat form the technical concerns

- Network discovery tools which are improved but still not up to the task, for example, the gophers which now have too many levels of menus to traverse to discover the information is no longer there or irrelevant. There are a variety of non-standard search protocols and commands. Network navigation remains frustrating, difficult, and time consuming.

- Lack of good published materials concerning what the Internet is, how to get connected, equipment needed, how to navigate the net, resources available, etc.

- Information overload illustrated by comments of too many messages to read, not enough time to explore, etc.

- Network fragmentation a strength that anyone can put anything up anywhere can also be a weakness without adequate organization which leads to redundancy, inability to consistently obtain the same search results using the same methods, and other forms of network chaos.

- Lack of network availability, in many local settings the Internet remains a myth, the local libraries and schools let alone homes do not have a network connection available. When travelling away from one's home network node there is no certainty of a network connection, for example, publicly accessible network kiosks.

- Confusing and non-standard methods of connection and access, every network provider, network software producer, remote login site, and network equipment manufacturer seems to have there own, unnecessarily, different way of connecting and accessing the network. Accessing network information even several weeks after it has been published on the network can be difficult or impossible.

- Finding and using network addresses remains difficult

- The daunting task of educating a nation of new network users, poor interfaces compound the problem, no new staff or monies are available, unclear mandate as to whose responsibility it is, etc.

- Gaps in the digital information available, respondents noted the hybrid situation we are increasingly entering, what is digitally available, what is still in analog (paper, microform, etc).

- Lack of online help, there are few help centers, with accurate information, who are customer-centered and responsive, that can respond in real time, to the diverse array of Internet user needs

- No authoritative locator of government information on the network this problem is compounded by the inability to accurately cite an item with the hope that it can be found again

- Little knowledge of the vast array of information already available from the government, even government officials were amazed at the diverse materials already available.

In comparing this list with early discussions with network users (McClure, Moen & Ryan, 1994, 1993, 1992) the problems with information overload and complaints that older material is not available in digital format were new to the study team.

Training

Respondents noted a number of barriers to use which can be grouped under the heading the need for training including:

- No 'Internet Starter Kit', one respondent summed up the common experience, "It was so frustrating at first, I almost gave up." Another noted simply, "It takes too long just to get started." The initial period of Internet use seems particularly crucial with the need often expressed for a local tutor or mentor.

- Lack of training opportunities most current network users in the Meckler conference were self-taught, the opportunities for training were rare, costly, or remote

- Technical-non-technical communication gap in the software commands, and person-to-person explanations there are a number of communication difficulties

- Keeping current remains a challenge, even if you are network aware

- The continued need to see and use the Internet before it begins to make sense this makes convincing both staff and users to try the Internet difficult

Most of these concerns are long-standing in nature.

Costs

Respondents noted a number of barriers to use which can be grouped under the heading costs of Internet access including:

- Cost of getting started high, the cost of equipment, connections, telecommunications charges appeared daunting for new users, particularly when they and service providers do not always know what to do.

- Connection, locator, & training should be free or cheap was a repeated statement by the respondents, this is not unreasonable in the context of other information technology introductions.

- Lack of clarity about what Internet will cost pricing information is often unclear or hard to obtain. No adequate picture of medium and longer term costs.

- Cost variability due to location (rural v. urban), service provider (some are more efficient, some more experienced), equipment (some service providers have newer and more efficient equipment), type of institution (school v. corporation) knowledge of user and provider. Costs also vary between what can be obtained on the network compared to off net. One respondent commented "Fees are inconsistent, some things are free when obtained one way and cost when obtained another, neither reflect true value." Another remarked: "It's very expensive, small schools who really need this service can't afford it."

- Cost to provide access to users hard to imagine, most respondents seem to be in the stage of transitioning from individual users to organization users, from learning the Internet for themselves to training their staff. Respondents did not know how they would pay for access for their clients when many could not afford to give access to all their staff.

In comparing this list with early discussions with network users (McClure, Moen & Ryan, 1994, 1993, 1992) the greater interest in expanding access to the organization's clients was new.

Information Rich - Information Poor

This barrier was of almost universal concern to the participants including the following concerns:

- "My staff don't own computers let alone our users, our organization just got its Internet connection and we are one of the few in the area to have one. Soon we will have an information rich and an information poor."
- "How will we provide public libraries with connectivity because not everyone will have a home or work account?"
- "Certain parts of the country pay more for access than others."
- "Why is non-institutional access to the Internet is harder to obtain."

While there was widespread recognition of the potential problem of network information rich and poor, great interest is avoiding the creation of these classes, solutions were not readily apparent to the respondents. Concerns in this area were frequently linked with the training issues discussed earlier. Clearly, greater attention needs to be paid to network literacy.

Organizational & Personnel Issues

Respondents noted a number of barriers to Internet access which can be grouped under the heading organizational and personnel issues including:

- No additional staff, staff untrained, "How do we teach the public to use the Internet when we have no additional staff time or staff is untrained?"
- Lack of technical support to keep network connection in operation. This was of special concern at the SIRM seminar where many Federal managers expressed the lack of support to deal with technical matters.
- Unclear roles, authority, responsibility "In my organization there is a lack of a clearly established source of help within an organization, it is all informal."

- Poor coordination among organizational units (inside and outside the organization), "In my organization there is a lack of coordination between organizational units, e.g. computer center and library." "There is a lack of support from our local university and the balkanization of information policy -- some institutions, or units within institutions support you, some don't..."

- Senior management ignorance or lack of leadership, "Middle and senior management and decision makers are ignorant of the role, uses, impacts of the Internet. This leadership is critical when introducing a new technology."

- Organizational inertia to anything new.

Most of these concerns are long-standing in nature.

Data Quality

Respondents noted a number of barriers to Internet access which can be grouped under the heading need to ensure data quality including:

- Data dumping, there was concern that Federal agencies might use Internet access as an inappropriate substitute for providing access to the information it produces. Concerns expressed included mounting information in electronic form whose chief users did not have ready access to the network; mounting information on the Internet without alerting users as to its availability; mounting incomplete or dated information and not updating or maintaining it. "Will the Internet be a central repository for government information or a marginal source of fugitive material?"

- Information which lacks credibility, documents available on the Internet are not fully documented, credited one can't always ascertain the quality, authority, currency, validity, and credibility of the documents obtained.

- Quantity v. quality "Lets stop data dumping, we are already overloaded." The need for quality control was repeatedly mentioned. "As a depository library we frequently see the best information sold and the rest offered (to us) free."

- Inability to cite Internet documents, there is no standard way to cite Internet documents and no guarantee that you will be able to obtain a document form the same source even days after you originally found it there.

- Data security, "As an information provider I want to be sure the information I send is secure, that is it is the same as is received and it has not been intercepted by someone else."

The quality of the data, viewed as a barrier has been gaining in significance as the number of experience Internet users increases.

Other Barriers

There were a range of other barriers and concerns mentioned by the respondents including the following:

- Gender, "When I get to the Internet its a 'Boys & Toys' perspective - why do I have to learn their game? Save me from the techies and get me to information where my executive position makes it possible to put it into use."

- Role ambiguity, "The dilemma we face is are we librarians, trainers (on how to use the system), or information providers?"

- Privacy, "A record could be kept of every document I used, I don't like it."

- Copyright, "Major court reporter series cannot be put on the Internet due to copyright considerations." "It is hard to know whether material accessed via the Internet is covered by copyright."

- Multi-media, "Media other than text is rarely available, no images or sound."

- Internet information provider barriers, "There is a lack of easy to install, maintain, and use commercially available software so that I can make information available on the Internet." "Time, cost, staff and technical knowledge needed to provide an Internet product or service is daunting."

- Marketing & Advertising, "How can we reliably alert others about the information we are making available on the Internet."

- Inability to strategically assess the Internet's importance, "We need to understand the role of this technology in the future of our business."

- Who's it for? "There is a lack of clarity, on the part of the general public concerning who the Internet is for - researchers, educators, business, who?"

The study team was amazed at the range and diversity of barriers to Internet connection, use, and information provision that these groups identified. Government agencies as they introduce their own staff to the Internet and begin to provide Internet accessible information products and services will have much to consider.

Types of Services

A composite picture of the types of services the respondents would like to see the government provide via the Internet includes the following. An economical (most said free or low cost) method for the average citizen (including children, those that are poor and those living in rural locations) to get information conveniently (most mentioned from home, public library, school. or town hall).

Locator of Government Information

The most frequent request was for a locator of government information that had the following characteristics:

- Easy to use (including standardized commands, data formats, search engines and intelligent retrieval tools that worked across platforms)
- Provided access to full-text not just citations
- Multi-media
- Multilingual
- Interactive (it was clear from the majority of comments that the respondents were not interested in passively receiving information)
- Accessible 24 hours a day
- Provided a variety of search approaches

- Included information not only about information in electronic formats but also non-electronic information (and how to obtain it) as well
- Allowed for convenient electronic ordering and billing (where necessary)
- Was associated with help or reference desk service that were customer oriented ("The IRS model won't do.") Where "a level of responsibility and customer service from the government should be expected"
- If training was needed, it would be locally available (most likely to be provided by the public libraries and schools)

The repeated image expressed was of a one-stop-shop access to everything citizens of all types would need including locator, sources, services, training, billing, and interactivity.

An Opportunity to Add-Value

Of particular note was the emphasis on using the Internet access as an opportunity for government to provide what one respondent termed "value-added" information. Common ways of adding-value included interactivity (two-way communication and help) and customization, training, and interpretation. The issue of whose responsibility was it to add value, the public or private sector was raised.

Those surveyed strongly indicated that government had a role to play in adding value, particularly in core government functions. One respondent noted the need for help desks to advise citizens about the law and interpret it for them. The respondent went on to remark that "the government makes the laws and regulations, it has a clear responsibility to explain and interpret them to its citizens." Those that make their living from reprocessing government information may have been under-represented

Responsive Government

There was a strong expectation evidenced that the Internet would lead to more responsive government including the following frequent requests:

- Internet access and directory information for the White House, Congress, agency officials and staff
- Answers to E-mailed messages to the White House
- The ability to E-mail a specific node at each agency and obtain responses to citizen queries
- Conduct online policy forums with citizen and decision maker participation
- Set up two way interactive services for distributing Federal benefits
- Electronic voting and polling on important issues not only with the President and Congress (the law making level) but at the agency (regulatory) level as well

There was the expressed expectation that access to an Internet locator and Internet enhanced responsive government service would eventually extend to state and local governments as well. There was also interest expressed in making at least some of this access and information available overseas. One respondent suggested that providing Internet connections to the nations of the world be made part of the services offered by the U.S. Peace Corp.

Key Government Information Sources Desired

Information resources that were mentioned by the respondents can be clustered into the following groups:

- Most popular: existing depository library materials, especially the *Congressional Record, Government Organization Manual, Federal Register, U.S. Census, ERIC, Medline,* all Presidential statements, speeches, reports, all Congressional Committee reports, hearings, prints, bills, markups; *Commerce Business Daily, EDGAR* SEC filings, NTIS documents (ability to download from the Internet), Patent & Trademark information, GAO reports
- Tax forms, information, help, and filling
- A network in support of children's education

- The law including: All primary law sources (including *U.S. Code*; All Federal and State reporters and calendars; *Code of Federal Regulations*) in full text and searchable (at least by Boolean), current and retrospective
- Job opportunities for Federal, State and local employment, would include information, forms, ability to schedule interviews, re-training opportunities
- Contractor and bidding notices
- Benefits: what is available, current status, applications, interactive help and negotiation, electronic funds transfer, selective dissemination of information linking eligible needy with available benefit
- Funding opportunities, announcements, forms, prior awards for all agencies
- Frequently used government forms
- A range of statistics including: U.S. Health and Vital Statistics series (Rainbow series), the *Statistical Abstract*, Historical time series figures, International financial statistics, Federal Reserve data by regions
- Voting information: voting records (with a variety of access points), Federal Election Commission information, Federal campaign contributions list, PAC and lobbyists contributions. Ability to vote electronically
- Federally funded research including raw data, in progress and final reports
- International interest including: Immigration information; State Department and embassy speeches, statements, reports, etc.; FBIS; National Security statements, speeches, reports; Intelligence documents recent and retrospective
- Consumer and small business information
- Agency directories, enforcement actions, legal filings, product recalls
- Digests: What happened today in government that affects education, income, kids? What did the president say today? What happened in Congress?
- Geographic information system (GIS) material accessible in ways that are meaningful to citizens

Also mentioned were a range of other items including: Public Opinion Polls conducted by or for the government, NISO Standards, NASA/RECON database, FAA Notice to Airmen, AHCPR Practice Guidelines, OSHA and MSDS standards.

Potential Solutions

The respondents were asked what are real world solutions to the barriers and need for Internet delivered services that you think the government ought to consider today? The responses have been clustered as funding issues, management, policy issues, standards, local access and training, dissemination issues, and address the public/private debate.

Costs

The respondents overwhelming agreed that:

- Local public connections to the emerging national information infrastructure are needed particularly as we transition to the electronic network and for the information poor
- Local assistance for citizens seeking to access the electronic network would be needed and that those providing the local assistance would need to be trained as well
- The likely local community nodes for network access and training were the public library, school, and/or city hall
- The content of the information available on the national information infrastructure should come in part from the Federal government
- The content of Federal information on the network should be organized via a government information locator
- Access to the network would be greatly enhanced by a standard, easy to use, interface that was the same (in use) across a variety of platforms (such as Windows, Unix, Macintosh-based operating systems).

The respondents agreed that it is the Federal government's role to ensure free or low cost local public access and training to an easy to use interface to a network which partially contains government produced information via a combination of incentives, subsidy, and direct funding.

Other funding and costs concerns mentioned by the respondents include:

- The need for upper management, Congress, and the Executive to realize that dissemination costs and money must be budgeted for it.
- The need to simplify the funding process, local libraries and schools do not have the time, staff, or expertise to apply, "the days of local full-time grant-writers are over but the government hasn't heard the message;"
- The need to consider funding cycles that last more than one year, local providers are expected to provide continuous service, one year is too short to accomplish may important objectives, this cycle doesn't allow enough time to adequately alert users of a projects termination (due to lack of funds)
- The need to fund work to solve the security, copyright and privacy issues
- The potential cost reductions due to the conversion from paper-based print to digitally networked forms and EDI should be seriously explored. These savings might be used to fund further network developments.

There was a general recognition that funding for Internet access and use would not come from new monies (offered by the Federal government or generated locally) but from incentives, cost-sharing, and re-allocation of existing resources.

Management

This area of respondent interest centers on activities that the Federal government itself should address to respond to the opportunities and challenges posed by the Internet including the need for:

- Clear support and direction from senior management and Congress
- Senior managers to adopt a risk management rather than risk avoidance approach
- Improve the procurement process so that the technology available on the Federal desktop is as good as the best in private industry: "Is GSA the problem?"

- A systematic plan, including realistic cost assessments, to move a greater number of paper-based documents to digital format
- Re-engineering and integration of agency and inter-agency functions in light of the opportunities that electronic networking make possible
- Reaffirmation of the government's commitment to free, public information. This will involve a re-definition of the dissemination roles and responsibilities of Federal agencies, in particular, GPO, NTIS and the Library of Congress
- Establishment of ground-rules of when and how Internet publication satisfies a legal mandate to agencies to disseminate certain types of information
- Realistically plan a transition in which both old and new ways of providing information products and services will be needed
- Offer Internet training for agency personnel
- A number of "skunkworks" which think about, prototype, and disseminate widely solutions to likely problem areas to be faced in the transitions to a digitally networked environment
- A lead agency to deal with and coordinate government-wide planning for the information policy issues which will arise. This should include oversight capacity to ensure that all agencies are providing effective access to the public of all of their (not exempted) materials
- Devising a mechanism to foster and encourage inter-agency sharing of resources, talents, and best practices
- All government official should have e-mail accounts which are made available in publicly accessible directories
- Government to adopt a "customer-service" attitude
- Recognition that this technology promotes a new, two-way interactive form of interaction, allowing for creative responsiveness
- Planning for sustained government commitment, "...or else it will all vaporize when Al Gore leaves..."

Many of the participants noted the need for new partnerships within government agencies, between agencies, between Federal and other governments, with the private sector and ultimately between government and citizen. A suggestion often made was to re-think how partnership agreements are made in addition to re-examining with whom they are made. Several urged government to publicly plan and coordinate Internet developments with special attention to involving all citizens.

Standards

The need for standards in a number of areas were of great concern to the respondents. Areas stressed were:

- Adoption of certain minimum standards for workstations, interfaces, telecommunications protocols (TCP/IP adopt, OSI drop), document formats (including images), uniform reporting of government funded research results
- The need for regulations on accuracy and delivery of information via the Internet
- Ending the requirement for single form of encryption (i.e. clipper chip)
- The need to develop standards faster

As each respondent addressed there was the clear assumption that government has a role to play and responsibility in standards development.

Access, Resource Discovery, & Training

This area evoked wide interest on the part of the respondents. Ideas expressed included overwhelming support for a government-wide locator. Other areas mentioned include:

- Focusing attention on the development of an "Internet Starter Kit" which addresses what the Internet is and motivates citizens to explore it, how to get connected, and how to navigate within cyberspace. Included would be the network-based, and paper documentation needed, support services such as a better funded InterNIC, a standard, easy to use interface, and local training as needed.

- Supplying free or low-cost local access points from such locations as public libraries, schools, and town halls. One respondent commented "Internet access, like rural free delivery, is a public right." Another respondent suggested that as a start the government provide a free Internet node in each congressional district.

- Funding for more efforts like NSF's EDGAR support

- The need to support the development of model community networks

It was assumed that the government had a clear responsibility in this area. Less clear were suggestions for how the government could maximize its role.

Address Public-Private Issue

The issue of what role should the government and the private sector play in the creation, production, value-adding, and dissemination of government information did not begin with the advent of the Internet. Advice and comments from the respondents was pointed:

- Prohibit public agencies from selling data

- Present commercial use of government data is piracy

- Start with the principal that if government information is free in paper for one then it should be free on the Internet for all

- Create a competitive environment for education provision as well as the other traditionally more commercial activities (news, entertainment, etc.)

- Government should not get out of the regulation (of the Internet) business until industry is self-regulating

- Don't let private interests dictate the future of the Internet. There was great fear concerning privatizing the Internet specifically in the areas of increased cost, loss of control, and poor quality of products and services offered.

- The majority of the Internet's content and its principal focus should not be entertainment

What is clear is that the Internet, like previous information technology introductions, is forcing a re-examination of all public-private arrangements and agreements.

What Agencies Can Do

The study team concluded its survey with a question directed to the government decision makers present at the SIRM seminar in Washington, DC: what important steps can Federal agencies take to improve the delivery of electronic services via the Internet? Responses included the following:

- Gopher and World Wide Web (WWW)/Mosaic hold potential as vehicles to establish an agency's presence on the Internet
- There is more need than ever to consult with end users, it is now possible to use feedback from citizens to change services delivery in real time
- It is time to modernize the agency information infrastructure
- The need to cooperate in the development of a government-wide locator
- The need to develop more cooperative relationships with the states
- Address the training and personnel issues that the introduction of this new information technology raises
- Encourage two-way interaction between agency and citizen via the Internet
- Currency and accuracy of Internet disseminated materials matters, data dumping doesn't work
- Consider marketing and advertising campaigns designed to promote Internet use and the availability of agency information on the network
- Congress and agency senior management need to recognize that the Internet is a priority and its adoption and use can't be done "out of hide" (through the good will of agency employees)
- It is now appropriate to plan for electronic distribution of agency information at the beginning of the information's life-cycle

- Agencies need to begin to transition to the digital environment by converting its paper-based forms to electronic format

- It is time to start to get the agency staff to use the Internet.

For many of the participants, there was a clear sense of the steps that needed to be taken to become active in the networked environment.

CONCLUSION

The difference between the level of awareness and interest between the December 1993 SIRM session and one held in 1992 was dramatic. In 1992 many agency officials had not heard of the Internet and were not sure they wanted to know about it. At the December, 1993 session the perspective was "what do I as an agency official need to know to introduce the Internet to my organization and its users properly?"

Judging from these participants, there now appears to be a critical mass of informed and excited agency middle managers. The next steps are to educate senior managers, carefully plan agency and interagency information policy in light of the Internet's potential, and deploy resources to support the move to the network environment. Senior management, however, may need additional encouragement from the Administration and Congress.

In addition, there is a growing interest in and awareness of government information among Internet users and others wishing to have access to electronic government information over the Internet. The combination of interest within the Federal government and interest from Internet users and others bodes well for developing successful strategies to provide better access to government information over the Internet.

What remains to be seen is the policy direction to be taken by the Federal government to support such access and promote the availability of electronic government information over the Internet. As this report suggests, there are numerous key policy issues yet to be resolved. The Clinton Administration, the IITF, the Congress, and interested groups in both the public and private sectors need to engage in *open* and *constructive* debate about how best to accomplish the Administration's policy goals for making government information more accessible and usable in the National Information Infrastructure.

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ATTACHMENT A
LET'S MAKE A DIFFERENCE HERE!

The Syracuse University, School of Information Studies, Study Team has been asked by the Information Infrastructure Task Force (IITF) to gather public input on barriers faced, services needed, and solutions found when connecting the government together and with its citizens. Your written thoughts here today will be compiled and presented to the IITF. You can make a difference.

Do you have an Internet account? YES NO How long have you had one? _____

What are the four most important key barriers you face when connecting to or using the Internet?

_____

_____

_____

What are five services you would like to see the government provide via the Internet?

_____

_____

_____

What are three real world solutions to the barriers and need for Internet delivered services you think the government ought to consider today?

_____

_____

_____

What are the three most important steps Federal agencies can take to improve the delivery of electronic services via the Interent?

_____

_____

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Additional Comments can be written on the back. Thank you for your thoughts!